



In re Application of: Examiner: M. R. Mertz STEVEN C. CLARK, ET AL. Group Art Unit: 1646 Serial No.: 08/466,308 Filed: June 6, 1995 CERTIFICATE RECOMBINANT HUMAN For: GRANULOCYTE-MACROPHAGE-JAN 2 0 2000 COLONY STIMULATING FACTOR (GM-CSF) OF CORRECTION U.S. Patent No.: 5,891,429 Issued: April 6, 1999 January 6, 2000

The Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

REQUEST FOR SUPPLEMENTAL CERTIFICATE OF CORRECTION

Sir:

It is respectfully requested that a Supplemental Certificate of Correction be issued by the Patent and Trademark Office due to errors which appear in the printed patent. A Certificate of Correction form, in duplicate, is enclosed.

04/04/2000 MBERHE1 00000019 061205 5891429 01 FC:145 100.00 CH Patentees believe that no additional fee is required since such was paid earlier. However, the Assistant Commissioner is authorized to charge any required fees to Deposit Account No. 06-1205.

Patentees' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

Attorney for Patentee

Lawrence S. Perry

Registration No. 31,865

FITZPATRICK, CELLA, HARPER & SCINTO 30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

LSP\ac

NY_50710 v 1

CERTIFICATE OF CORRECTION

5,891,429 PATENT NO.

April 6, 1999 DATED

INVENTOR(S) STEVEN C. CLARK, ET AL. Page 1 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

ON THE TITLE PAGE AT [54] TITLE & (1)

"GRANULOCYTE-" should read --GRANULOCYTE--.

ON THE TITLE PAGE AT [73] ASSIGNEE

"Switzerland" should read --Basel, Switzerland--

AT [56] REFERENCES CITED

OTHER PUBLICATIONS

"Gongh et al." should read --Gough et al.-- and "Blenckley et al." should read --Bleackley et al..

COLUMN 1

Line 1, "GRANULOCYTE-" should read -- GRANULOCYTE-

COLUMN 2

Line 6, "active" should read --activity--; Line 36, "ape" should read --and ape--; Line 52, "Maniatis T." should read --(Maniatis, T.-

and

Line 59, "sequences;" should read --sequence; --

COLUMN 3

Line 22, "CSF" should read --CSF's--.

PATENT NO. 5,891,429

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COLUMN 4

Line 55, "tern" should read --term--.

COLUMN 6

Line 40, "polyadanylation" should read --polyadenylation--; and
Line 52, "publically" should read --publicly-

COLUMN 7

Line 10, "census" should read --sensus--;
Line 22, "sequencs" should read --sequence--;

Line 22, "sequencs" should read --sequence--; Line 29, "concensus" should read --consensus-7; and

Line 38, "inton" should read --intron--.

COLUMN 8

Line 20, "aactivity" should read --activity--./

COLUMN 10

Line 2, " $2x10^7$ " should read $--1x10^7$ --;

Line 45, "ultogel," should read --ultrogel, - and

Line 47, "form" should read --from--.

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COLUMN 11

Line 46, "rheumataoid" should read --rheumatoid-Line 49, "limitive" should read --limitative-;

Line 53, "Restrictions" should read -- Restriction

Line 57, "buffar" should read --buffer--; and

Line 61, "Tris-botate," should read --Tris-bora

COLUMN 12

Line 43, "3 ," should read --3 hours,--; ar Line 61, "CSP" should read --CSF--.

COLUMN 13

Line 2, "monacytes" should read --monocytes-Line 7, "2%" should read --2x--;

Line 31, "pSVOD" should read --pSVOd-;
Line 36, "pCSVL2" should read --pCSVL-2--;
Line 37, "FIG. 2." should read --FIGS. 2 and 3--; and
Line 63, "5' of" should read --5' or 3' of--

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COLUMN 14

Line 8, "pCVL2-" should read --pCVSVL-2-Line 17, "with," should read --with--;
Line 24, "pSR322-Ad" should read --pBR322-Ad-

Line 28, "EcoR1)." should read --EcoR1).--;
Line 29, "E. coli HB102." should read E. coli HB101
Line 30, "resistances," should read --resistance,
Line 36, "fragment" should read --fragments,-Line 40, "fragments" should read --fragments,--

Line 52, "p9123(B)" should read --p91023(B)--; Line 55, "step 4." should read --Step 4:--; and Line 59, "5 ng/al" should read --5 ng/ml-.

COLUMN 15

Line 13, "SW4centrifuge" should read

--SW41 centrifuge--; Line 36, "dt-cellulose" should read --dT-cellylose

Line 52, "there" should read --then--; and Line 63, "pH 9.4. 14 C mM KCl," should read

--pH 8.4, 140 mM KCl,---

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COLUMN 16

Line 7, "chloroform" should read --chloroform,--;

Line 40, "pCGAATTCCG)" should read --pCGGAATTCCG)

Line 50, "1" should read --1%--.

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COLUMN 17

Line 2, "25 transformation," showld read --25 transformations--; and

Line 61, "heatinactivated" should read --heat-inactivated--.

COLUMN 18

Line 2, "glutamine" should read --glutamine,

Line 24, "ug/ml" should read $--\mu$ g/ml--;

Line 37, "ul" should read $-\mu l - \mu$.

Line 50, "insect." should read -insert.

Line 54, "3 sequencing" should read --sequencing-

COLUMN 19

Line 1, "glutamine." should read --glutamine

Line 2, "ug/ml" should read $--\mu$ g/ml-

Line 12, "SP" should read --SF--; C Line 13, "SP" should read --SF--;

Line 18, "sample" should read --samples

Line 28, "bias" should read --was--

Line 33, "wag" should read --was--

Line 37, "It" should read --(It--; Line 44, "TEA." should read --TFA.

Line 45, "gradiant" should read --gradient

"acatonitrile" should read --acetonitrile--; Line 47, "acatonitrile" should read /-acetonitrile

and "20 ul" should read $-20-\mu l - ;$ \(\frac{1}{2} \)
Line 49, "electrophorasis" should read

--electrophoresis--; and

Line 56, "ug" should read

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```
COLUMN 20
      Line 8, "product" should read --produce--;
      Line 10, "tetrdecanoyl" should read --petradecanoy Line 18, "ug" should read -- \mug -- \mu; and
"Of" should read --of--;
      Line 19, "ul" should read
      Line 23, "ul." should read --\mul.-
      Line 42, "ul" should read --\mu l --;
      Line 44, "ul" (both occurrences) should read --\mu l
Line 50, "ul" should read --\mu l and
"EDNA," should read --EDTA--; "
      Line 56, "ul" should read -\mu l - ; Line 57, "ul" should read -\mu l - ; and \mathcal{N} Line 60, "ug/ml" should read -\mu g/ml - ...
COLUMN 21
       Line 10, "ul" should read --\mu l--;
       Line 12, "Magnesium" should read --magnesium--;
       Line 14, "ul." should read \mu l - - \kappa
       Line 16, "ul" should read --\mu l--;
       Line 17, "ul" (both occurrences) Should read
       Line 18, "uCi/ul," should read --\muCi/\mul
       Line 20, "ul" should read --\mu l--;
       Line 28, "complimentary" should read --complementary-
Line 29, "32p" should read --32p--;
       Line 39, "difference" should read -
       Line 56, "rmp," should read --rpm,--;
       Line 66, "(40^{\circ}\text{C.,"} should read --(4^{\circ}\text{C}
```

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COLUMN 22

```
Line 16, "m" should read --M--;
     Line 22, "ug" should read --\mu g
     Line 23, "ul" should read --\mul-
     Line 25, "ug" should read -
"ul" should read --\mu l-; /
     Line 27, "mm" should read
"uM" should read --\muM-;
     Line 28, "ug" should read -\mu g—;
     Line 29, "uCi" should read \muCi-;(
     Line 30, "uCi/mmole)" should read
     Line 35, "ul" should read --\mu l-;
     Line 41, "mm" should read --mM-;
     Line 44, "ug" should read -- µg-;
     Line 45, "ul" should read --\mu l-; (
     Line 49, "RNAsAe" should read -- RNAse-; (
     Line 51, "uM" (both occurrences) should read
     Line 52, "uCI" should read --\muCi-
     Line 58, "ul" should read -\mu1; and Line 66, "ul" should read -\mu1.
```

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COLUMN 23

Line 4, "ul" should read $--\mu l--$; Line 18, "ul" should read $--\mu l--$;

Line 19, "ul" should read $--\mu l - \Omega$ and

"bacterial" should read --bacteria--;

Line 26, "ug/ml" should read $--\mu$ g/ml-

Line 27, "mation" should read --mations--;
Line 37, "filter was carefully placing methods, in

which each original" should be deleted;

Line 53, "40°C." should read --4°C--; Line 59, "m" should read --M--;

Line 62, "Sodium" should read --sodium--; and Line 63, "Citrate," should read --citrate,--

COLUMN 24

Line 12, "HTLV-1" should read --HTLV-II--;

Line 46, "KFBA" should read -- HFBA--; Line 53, "ul" should $--\mu$ l--; and α

Line 64, "ug" should read $--\mu$ g-

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 25

Line 3, "Plasmid" should read ¶ Plasmid--; Line 12, "MgSO4" should read --MgSO4--;

"5 ug/ml" should read --5 μ g/ml--; and

"10 ug/ml" should read --10 µg/ml--;

Line 14, "ug/ml" should read $--\mu$ g/ml--;

Line 17, " 40° C." should read -4° C--;

Line 18, "mm" should read --mM--; Line 26, "mm" should read --mM--;

Line 44, "ug/ml" should read $-\mu$ g/ml-2

Line 50, "subcultered" should read -- subcultured

COLUMN 26

Line 10, "uM" should read $--\mu M--$;//

Line 11, "uM.MTX." should read $--\mu$ M MTX.--;

Line 14, "uM.MTX" (both occurrences) should read

--μM MTX--; 🔑

Line 15, "uM.MTX" should read $--\mu$ M MTX.--;

Line 16, "uM.MTX." should read $--\mu M$ MTX.--;

Line 25, "diagramatic" should read --diagrammatic Line 32, "TAR-" should read --TAR--; and

Line 50, "4204-4208." should read --4204-4208)

COLUMN 27

Line 18, "Na₂HPO₄7H₂O" should read --Na₂HPO₄·7H₂O Line 28, "ul" should read -- μ l--; and

Line 32, "GM-CSP" should read --GM-CSF

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Page 10 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 28

Line 23, "i.a." should be deleted;

Line 25 through Column 32, line 11, delete all text

(e.g., "1. A method for preparing and isolating a
transformation vector containing CSF/cDNA, said method
comprising: ... 127 amino acid CSF coding nucleotide sequence
of plasmid p91023(B)-CSF deposited therein.")

COLUMN 32

Line 51, "CSF" should read --GM-CSF--.

()

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ON THE TITLE PAGE AT [54] TITLE AND COLUMN 1,

"GRANULOCYTE-" should read -- GRANULOCYTE--.

ON THE TITLE PAGE AT [73] ASSIGNEE

"Switzerland" should read --Basel, Switzerland--.

AT [56] REFERENCES CITED

OTHER PUBLICATIONS

"Gongh et al." should read --Gough et al.-- and "Blenckley et al." should read --Bleackley et al.--.

COLUMN 1

Line 1, "GRANULOCYTE-" should read --GRANULOCYTE--.

COLUMN 2

Line 6, "active" should read --activity--;

Line 36, "ape" should read -- and ape--;

Line 52, "Maniatis T." should read -- (Maniatis, T.--;

and

Line 59, "sequences;" should read --sequence; --.

COLUMN 3

Line 22, "CSF" should read --CSF's--.

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COLUMN 4

Line 55, "tern" should read --term--.

COLUMN 6

Line 40, "polyadanylation" should read --polyadenylation--; and
Line 52, "publically" should read --publicly--.

COLUMN 7

Line 10, "census" should read --sensus--;

Line 22, "sequencs" should read --sequence--;

Line 29, "concensus" should read --consensus--; and

Line 38, "inton" should read --intron--.

COLUMN 8

Line 20, "aactivity" should read --activity--.

COLUMN 10

Line 2, " $2x10^7$ " should read $--1x10^7$ --;

Line 45, "ultogel," should read --ultrogel,--; and

Line 47, "form" should read --from--.

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Line 46, "rheumataoid" should read --rheumatoid--;
```

Line 49, "limitive" should read --limitative-;

Line 53, "Restrictions" should read -- Restriction--;

Line 57, "buffar" should read --buffer--; and

Line 61, "Tris-botate," should read --Tris-borate, --.

COLUMN 12

```
Line 43, "3 ," should read --3 hours,--; and
```

Line 61, "CSP" should read --CSF--.

COLUMN 13

```
Line 2, "monacytes" should read --monocytes--;
```

Line 7, "2%" should read --2x--;

Line 31, "pSVOD" should read --pSVOd-; Line 36, "pCSVL2" should read --pCSVL-2--;

Line 37, "FIG. 2." should read --FIGS. 2 and 3--; and Line 63, "5' of" should read --5' or 3' of--.

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Line 17, "with," should read --with--;
Line 24, "pSR322-Ad" should read --pBR322-Ad--;
Line 28, "EcoR1 )." should read --EcoR1).--;
Line 29, "E. coli HB102." should read E. coli HB101--;
Line 30, "resistances," should read --resistance,--;
Line 36, "fragment" should read --fragments,--;
Line 40, "fragments" should read --fragments, --;
Line 52, "p9123(B)" should read --p91023(B)--;
```

Line 55, "step 4." should read -- Step 4.--; and

Line 59, "5 ng/al" should read --5 ng/ml-.

COLUMN 15

```
Line 13, "SW4centrifuge" should read
--SW41 centrifuge--;
       Line 36, "dt-cellulose" should read --dT-cellulose--;
Line 52, "there" should read --then--; and
Line 63, "pH 9.4. 14 C mM KCl," should read
--pH 8.4, 140 mM KCl,--.
```

```
Line 7, "chloroform" should read --chloroform, --;
Line 40, "pCGAATTCCG)" should read --pCGGAATTCCG)--; and Line 50, "1" should read --1%--.
```

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COLUMN 17

Line 2, "25 transformation" should read --25 transformations--; and Line 61, "heatinactivated" should read --heat-inactivated--.

COLUMN 18

```
Line 2, "glutamine" should read --glutamine, --;
```

Line 24, "ug/ml" should read $-\mu$ g/ml--; Line 37, "ul" should read $-\mu$ l--; Line 50, "insect." should read --insert.--; and Line 54, "3 sequencing" should read --sequencing--.

COLUMN 19

```
Line 1, "glutamine." should read --glutamine, --;
```

Line 2, "ug/ml" should read $--\mu$ g/ml--; Line 12, "SP" should read --SF--;

Line 13, "SP" should read --SF--;

Line 18, "sample" should read --samples--;

Line 28, "bias" should read --was--;

Line 33, "wag" should read --was--; Line 37, "It" should read --(It--;

Line 44, "TEA." should read --TFA.--;

Line 45, "gradiant" should read --gradient--; and

"acatonitrile" should read --acetonitrile--;

Line 47, "acatonitrile" should read --acetonitrile--;

and "20 ul" should read $--20-\mu$ l--;

Line 49, "electrophorasis" should read

--electrophoresis--; and

Line 56, "ug" should read $--\mu g$ ---

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COLUMN 20

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Line 8, "product" should read --produce--;
Line 10, "tetrdecanoyl" should read --tetradecanoyl--;
Line 18, "ug" should read --\mug--; and

"Of" should read --of--;
Line 19, "ul" should read --\mul--;
Line 23, "ul." should read --\mul---;
Line 42, "ul" should read --\mul---;
Line 44, "ul" (both occurrences) should read --\mul---;
Line 50, "ul" should read --\mul---; and

"EDNA," should read --EDTA--;
Line 56, "ul" should read --\mul---;
Line 57, "ul" should read --\mul---;
Line 60, "ug/ml" should read --\mug/ml--.
```

```
Line 10, "ul" should read --µl--;
Line 12, "Magnesium" should read --magnesium--;
Line 14, "ul." should read µl--;
Line 16, "ul" should read --µl--;
Line 17, "ul" (both occurrences) should read --µl--;
Line 18, "uCi/ul," should read --µCi/µl,--;
Line 20, "ul" should read --µl--;
Line 28, "complimentary" should read --complementary--;
Line 29, "³²p" should read --³²P--;
Line 39, "difference" should read --differences--;
Line 56, "rmp," should read --rpm,--;
Line 66, "(40°C.," should read --(4°C.,--.
```

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```
Line 16, "m" should read --M--;
Line 22, "ug" should read --µg-;
Line 23, "ul" should read --µl-;
Line 25, "ug" should read --µg-; and

"ul" should read --µl-;
Line 27, "mm" should read --mM-; and

"uM" should read --µM-;
Line 28, "ug" should read --µg-;
Line 29, "uCi" should read µCi-;
Line 30, "uCi/mmole)" should read --µl-;
Line 35, "ul" should read --µl-;
Line 41, "mm" should read --mM-;
Line 44, "ug" should read --µg-;
Line 45, "ul" should read --µl-;
Line 49, "RNAsAe" should read --RNAse-;
Line 51, "uM" (both occurrences) should read --µM-;
Line 52, "uCI" should read --µl-;
Line 58, "ul" should read --µl-;
Line 58, "ul" should read --µl-;
Line 66, "ul" should read --µl-;
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COLUMN 23

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Line 4, "ul" should read --µl--;
Line 18, "ul" should read --µl--;
Line 19, "ul" should read --µl--; and
"bacterial" should read --bacteria--;
Line 26, "ug/ml" should read --µg/ml--;
Line 27, "mation" should read --mations--;
Line 37, "filter was carefully placing methods, in
which each original" should be deleted;
Line 53, "40°C." should read --4°C--;
Line 59, "m" should read --M--;
Line 62, "Sodium" should read --sodium--; and
Line 63, "Citrate," should read --citrate,--.
```

```
Line 12, "HTLV-1" should read --HTLV-II--;
Line 46, "KFBA" should read -- HFBA--;
Line 53, "ul" should --\mul--; and
Line 64, "ug" should read --\mug--.
```

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,891,429

DATED : April 6, 1999

INVENTOR(S) : STEVEN C. CLARK, ET AL.

Page 9 of 10

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

COLUMN 25

```
Line 3, "Plasmid" should read ¶ Plasmid--;
Line 12, "MgSO4" should read --MgSO<sub>4</sub>--;
"5 ug/ml" should read --5 µg/ml--; and
"10 ug/ml" should read --10 µg/ml--;
Line 14, "ug/ml" should read --µg/ml--;
Line 17, "40°C." should read --4°C--;
Line 18, "mm" should read --mM--;
Line 26, "mm" should read --mM--;
Line 44, "ug/ml" should read --µg/ml--; and
Line 50, "subcultered" should read --subcultured--.
```

COLUMN 26

```
Line 10, "uM" should read --\(mu\)MTX.--;
Line 11, "uM.MTX." should read --\(mu\)MTX.--;
Line 14, "uM.MTX" (both occurrences) should read
--\(mu\)MTX--;
Line 15, "uM.MTX" should read --\(mu\)MTX.--;
Line 16, "uM.MTX." should read --\(mu\)MTX.--;
Line 25, "diagramatic" should read --diagrammatic--;
Line 32, "TAR-" should read --TAR--; and
Line 50, "4204-4208." should read --4204-4208).--.
```

```
Line 18, "Na<sub>2</sub>HPO<sub>4</sub>7H<sub>2</sub>O" should read --Na<sub>2</sub>HPO<sub>4</sub>·7H<sub>2</sub>O--;
Line 28, "ul" should read --\mul--; and
Line 32, "GM-CSP" should read --GM-CSF--.
```